

Title (en)  
FUNCTIONALIZED RUBBERS

Title (de)  
FUNKTIONALISIERTE KAUTSCHUKE

Title (fr)  
CAOUTCHOUCS FONCTIONNALISÉS

Publication  
**EP 3867288 B1 20221026 (EN)**

Application  
**EP 19829642 A 20191226**

Priority  
• EP 18383003 A 20181228  
• EP 2019087046 W 20191226

Abstract (en)  
[origin: WO2020136223A1] The present invention relates to a process for the functionalization of a rubber polymer comprising reacting the rubber polymer with at least one source of nitrene or carbene, in the presence of a catalyst of formula TpxAg, wherein Tpx represents a hydrotris(pyrazolyl)borate ligand. This process leads to selective rubber functionalization without secondary reactions such as chain scission or cross linking and produces functionalized rubbers with improved compatibilization properties. The invention also refers to the polymer produced therefrom and to uses of said polymer.

IPC 8 full level  
**C08F 212/08** (2006.01); **C08C 19/00** (2006.01); **C08C 19/22** (2006.01); **C08L 21/00** (2006.01)

CPC (source: EP KR US)  
**B01J 31/146** (2013.01 - US); **C08C 19/20** (2013.01 - KR); **C08C 19/22** (2013.01 - EP KR US); **C08F 8/32** (2013.01 - KR);  
**C08F 8/36** (2013.01 - KR); **C08L 15/00** (2013.01 - US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2020136223 A1 20200702**; BR 112021011049 A2 20210831; CA 3120820 A1 20200702; CN 113227174 A 20210806;  
CN 113227174 B 20240426; EP 3867288 A1 20210825; EP 3867288 B1 20221026; ES 2932009 T3 20230109; JP 2022516884 A 20220303;  
KR 20210137433 A 20211117; MX 2021007831 A 20210811; PL 3867288 T3 20230206; TW 202028255 A 20200801; TW I832951 B 20240221;  
US 2022025162 A1 20220127

DOCDB simple family (application)  
**EP 2019087046 W 20191226**; BR 112021011049 A 20191226; CA 3120820 A 20191226; CN 201980086032 A 20191226;  
EP 19829642 A 20191226; ES 19829642 T 20191226; JP 2021538131 A 20191226; KR 20217023748 A 20191226; MX 2021007831 A 20191226;  
PL 19829642 T 20191226; TW 108148279 A 20191230; US 201917311923 A 20191226